

In the Claims:

Please amend the claims as follows, and note that the following listing of claims will replace all prior versions, and prior listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A process for forming an electrical conductor on a substrate, consisting essentially of:
 - (a) providing an ink comprising ~~ing~~ ed of a metallic chelate, the metallic chelate having at least one constituent selected from the group consisting of: hfa, COD, VTMS, H₂O, tetraglyme, diglyme, SEt₂, and trimethylphosphine;
 - (b) printing ~~directly thereon~~ the ink directly on the substrate; and
 - (c) decomposing the ink wherein the metal-chelate is converted to a solid metal conductor on the substrate.
2. (Currently Amended) The process of claim 1 wherein the ink further comprises at least one constituent selected from the group consisting of a binder, or a stabilizer, or and both a binder and a stabilizer.
3. (Original) The process of claim 1 wherein the ink is printed at a pressure in the range of 200 to 700 torr.
4. (Original) The process of claim 1 wherein the metal conductor has a line width less than 100 microns.
5. (Currently Amended) The process of claim 1 wherein the metal conductor has a grain size in the range of 50 to 200 nm.
6. (Original) The process of claim 1 wherein the metal conductor has a thickness less than 1 micron.
7. (Currently Amended) The process of claim 1 wherein the metal is selected from the group consisting of copper, silver, gold, aluminum ~~or~~ and nickel.

8. (Original) The process of claim 1 wherein the metal-chelate is selected from a group consisting of metal β -diketonates, metal amides, metal organometallics and metal alkoxides.

9. (Currently Amended) The process of claim 1 wherein the metal-chelate is ~~Eu(hfa)•VTMS~~Cu(hfa)•VTMS, [Ag(hfa)(diglyme)]₂, Ag(hfa)(COD) or ethyl(trimethylphosphine)gold(I).

10. (Canceled)

11. (Currently Amended) The process of claim 1 wherein decomposing the metal-chelate is by heating in an atmosphere selected from the group consisting of nitrogen or and air at a temperatures less than 400°C.

12. (Currently Amended) The process of claim 1 wherein the ink further comprises metallic particles having a size in the range of 1 to 100 nm.

13. (Currently Amended) The process of claim 5 10 wherein the polymer is Kapton.

14. (Currently Amended) The process of claim 12 wherein the particles are selected ~~form~~ from a group consisting of copper, silver, ~~or~~ and gold.

15. (Original) The process of claim 12 wherein the ink further comprises a solvent.

16. (Original) The process of claim 12 wherein the metal-chelate is selected from a group consisting of metal β -diketonates, metal amides, metal organometallics and metal alkoxides.

17. (Currently Amended) The process of claim 12 wherein the metal chelate is selected from a group consisting essentially of ~~Eu(hfa)•VTMS~~Cu(hfa)•VTMS, Ag(hfa)•tetraglyme, and ethyl(trimethylphosphine)gold(I).

18. (Canceled)

19. (Currently Amended) The process of claim 12 wherein decomposing is by heating in an atmosphere selected from the group consisting of air or and nitrogen at temperatures less than about 300°C.

20. (Original) The process of claim 15 wherein the solvent is toluene.
21. (Canceled)
22. (Currently Amended) The process of claim 15 wherein decomposing is by heating in an atmosphere selected from the group consisting of air or and nitrogen at temperatures of less than 300°C.
23. (Currently Amended) The process of claim 15 wherein the particles are selected ~~form~~ from a group consisting of copper, silver, ~~or~~ and gold.
24. (Original) The process of claim 15 wherein the metal-chelate is selected from a group consisting of metal β -diketonates, metal amides, metal organometallics and metal alkoxides.
25. (Currently Amended) The process of claim 15 wherein the metal chelate is selected from a group consisting essentially of Cu(hfa)•COD, ~~CU(hfa)•VTMS~~ Cu(hfa)•VTMS, [Ag(hfa)]₂•H₂O, Ag(hfa)•tetraglyme, [Ag(hfa)(diglyme)]₂, Ag(hfa)(COD), Ag(hfa)(SEt₂) and ethyl(trimethylphosphine)gold(I).

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